

Abstract

The present invention is a method, and a kit for carrying out the method, of separating phosphorylated peptides from a mixture of phosphorylated and
5 unphosphorylated peptides. The method involves reacting a collection of peptides, in which some of the peptides have one or more phosphate groups, with a first resin. The peptides are then reacted with a capture ligand which reacts with the phosphate group of the phosphorylated peptides to form a bond. The capture ligand is used to separate the phosphorylated peptides from the
10 unphosphorylated peptides.